## SEQUENCE LISTING

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<110> Ghayur, Tarig et al.
<120> ANTIBODIES THAT BIND HUMAN INTERLEUKIN-18 AND METHODS
      OF MAKING AND USING
<130> BBI-149
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<150> 60/181,608
<151> 2000-02-10
<160> 71
<170> PatentIn Ver. 2.1
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Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile 35 40 45

Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile
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Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys Glu Asn Lys Ile 65 70 75 80

Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly His Asp Asn Lys
100 105 110

Met Gln Phe Glu Ser Ser Ser Tyr Glu Gly Tyr Phe Leu Ala Cys Glu 115 120 125

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Gly Asp Arg Ser Ile Met Phe Thr Val Gln Asn Glu Asp 150 155

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Gly Gln Asp Met Glu Gln Gln Val Val Phe Ser Met Ser Phe Val Gln
35 40 45

Gly Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu 50 55 60

Lys Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu 65 70 75 80

Gln Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Met Glu 85 90 95

Lys Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe 100 105 110

Glu Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Gln Ala Glu 115 120 125

Asn Met Pro Val Phe Leu Gly Gly Thr Lys Gly Gly Gln Asp Ile Thr

Asp Phe Thr Met Gln Phe Val Ser Ser 145 150

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Asn Val Asn Leu Glu Glu Lys Ile Asp Val Val Pro Ile Glu Pro His
Ala Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser Cys Val
Lys Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Ala Val Asn Ile Thr
Asp Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile Arg
Ser Asp Ser Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly
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Leu Lys His Cys Ser Cys Ser Leu Ala His Glu Ile Glu Thr Thr
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Lys Ser Trp Tyr Lys Ser Ser Gly Ser Gln Glu His Val Glu Leu Asn
Pro Arg Ser Ser Arg Ile Ala Leu His Asp Cys Val Leu Glu Phe
Trp Pro Val Glu Leu Asn Asp Thr Gly Ser Tyr Phe Phe Gln Met Lys
Asn Tyr Thr Gln Lys Trp Lys Leu Asn Val Ile Arg Arg Asn Lys His
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	Lys	Phe	Phe 115	Gln	Ile	Thr	Cys	Glu 120	Asn	Ser	Tyr	Tyr	Gln 125	Thr	Leu	Va.
	Asn	Ser 130	Thr	Ser	Leu	Tyr	Lys 135	Asn	Cys	Lys	Lys	Leu 140	Leu	Leu	Glu	Ası
	Asn 145	Lys	Asn	Pro	Thr	Ile 150	Lys	Lys	Asn	Ala	Glu 155	Phe	Glu	Asp	Gln	Gl; 16
	Tyr	Tyr	Ser	Cys	Val 165	His	Phe	Leu	His	His 170	Asn	Gly	Lys	Leu	Phe 175	Ası
	Ile	Thr	Lys	Thr 180	Phe	Asn	Ile	Thr	Ile 185	Val	Glu	Asp	Arg	Ser 190	Asn	Ile
	Val	Pro	Val 195	Leu	Leu	Gly	Pro	Lys 200	Leu	Asn	His	Val	Ala 205	Val	Glu	Lei
	Gly	Lys 210	Asn	Val	Arg	Leu	Asn 215	Cys	Ser	Ala	Leu	Leu 220	Asn	Glu	Glu	Ası
	Val 225	Ile	Tyr	Trp	Met	Phe 230	Gly	Glu	Glu	Asn	Gly 235	Ser	Asp	Pro	Asn	11e 24
	His	Glu	Glu	Lys	Glu 245	Met	Arg	Ile	Met	Thr 250	Pro	Glu	Gly	Lys	Trp 255	Hi
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	Ile	Asp	Val	Arg	Pro	Cys	Pro	Leu	Asn	Pro	Asn	Glu	His	Lys	Gly	Thi

Cys Lys Glu Arg Glu Glu Lys Ile Ile Leu Val Ser Ser Ala Asn Glu 15

Ile Asp Val Arg Pro Cys Pro Leu Asn Pro Asn Glu His Lys Gly Thr 25

Ile Thr Trp Tyr Lys Asp Asp Ser Lys Thr Pro Val Ser Thr Glu Gln As Ser Arg Ile His Gln His Lys Glu Lys Leu Trp Phe Val Pro Ala Sy Val Glu Asp Ser Gly His Tyr Tyr Cys Val Val Arg Asn Ser Ser

65 70 75 80 Tyr Cys Leu Arg Ile Lys Ile Ser Ala Lys Phe Val Glu Asn Glu Pro Asn Leu Cys Tyr Asn Ala Gln Ala Ile Phe Lys Gln Lys Leu Pro Val Ala Gly Asp Gly Gly Leu Val Cys Pro Tyr Met Glu Phe Phe Lys Asn Glu Asn Asn Glu Leu Pro Lys Leu Gln Trp Tyr Lys Asp Cys Lys Pro Leu Leu Asp Asn Ile His Phe Ser Gly Val Lys Asp Arg Leu Ile 150 155 Val Met Asn Val Ala Glu Lys His Arg Gly Asn Tyr Thr Cys His Ala 165 170 Ser Tyr Thr Tyr Leu Gly Lys Gln Tyr Pro Ile Thr Arg Val Ile Glu 185 Phe Ile Thr Leu Glu Glu Asn Lys Pro Thr Arg Pro Val Ile Val Ser 200 Pro Ala Asn Glu Thr Met Glu Val Asp Leu Gly Ser Gln Ile Gln Leu 215 Ile Cys Asn Val Thr Gly Gln Leu Ser Asp Ile Ala Tyr Trp Lys Trp 230 Asn Gly Ser Val Ile Asp Glu Asp Asp Pro Val Leu Gly Glu Asp Tyr 250 Tyr Ser Val Glu Asn Pro Ala Asn Lys Arg Arg Ser Thr Leu Ile Thr 260 265 Val Leu Asn Ile Ser Glu Ile Glu Ser Arg Phe Tyr Lys His Pro Phe 280 Thr Cys Phe Ala Lys Asn Thr His Gly Ile Asp Ala Ala Tyr Ile Gln 290 295 Leu Ile Tyr Pro Val Thr <210> 9 <211> 6 <212> PRT <213> Homo sapiens <400> 9 Thr Gly Tyr Tyr Ile His

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Lys Glu Gly Ala
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Gln Gly Asp Ser Leu Arg His Phe Tyr Pro Asn
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Gly Lys Asn Asn Arg Pro Ser
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Gly Ser Arg Asp Ser Ser Gly Ile His Val Val
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Gln Gly Asp Ser Leu Arg His Phe Tyr Ser Asn
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Tyr Ile His Trp Val Arg Gln Ala His Gly Gln Gly Phe Glu Trp Ile
                             40
Gly Arg Leu Asn Pro Thr Thr Gly Asp Ala Asn Phe Ala Glu Lys Phe
                         55
Gln Gly Arg Val Ala Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
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Leu Gln Leu Asp Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
Ala Gly Lys Glu Gly Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser
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Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
Gly Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
Asp Glu Ala Asp Tyr Tyr Cys Gly Ser Arg Asp Ser Ser Gly Ile His
Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
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Ser Tyr Ala Met
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25

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Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn 50 55 60

Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp 65 70 75 80

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Asp Asp Tyr Asp Phe Asp 85 90 95

Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser 100 105

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<211> 111

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ij

Han han han

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Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ile Asn 20 25 30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu 35 40 45

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
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Lys Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr 35 40 45

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Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
Thr Ala Val Tyr Tyr Cys Ala Arg Asp Asp Asp Tyr Asp Phe Asp
Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
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Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu
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Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile
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Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ile Asn Ala Val Asn Trp
Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn
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Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser
                               185
Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu
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Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Gly Pro Val
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Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
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Glu Ser Lys Leu Ser Val Ile Arg Asn Leu Asn Asp Gln Val
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Val Ile Arg Asn Leu Asn Asp Gln Val Leu Phe Ile Asp Gln

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LT
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Asn Arg Pro Leu Phe Glu Asp Met Thr Asp Ser Asp Cys Arg
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       Glu Asp Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg
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       Met Asn Pro Pro Asp Asn Ile Lys Asp Thr Lys Ser Asp Ile
LT
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Asp Gln Val Leu Phe Ile Asp Gln Gly Asn Arg Pro Leu Phe Glu Asp
Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile
Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile
Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys Glu Asn Lys Ile
Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile Lys Asp Thr Lys
Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly His Asp Asn Lys
                                105
Met Gln Phe Glu Ser Ser Tyr Glu Gly Tyr Phe Leu Ala Cys Glu
        115
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tcg atg aaa gtc tcc tgt aag act tct gga tac acc ttc acc ggc tat
                                                                   96
Ser Met Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Gly Tyr
                                 25
tat atc cac tgg gtg cga cag gcc cct gga cag gga ttc gag tgg ata
                                                                   144
Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Phe Glu Trp Ile
gga cgg ctc aac ccc acc act ggt gac gca aat ttt gca gaa aag ttt
                                                                   192
Gly Arg Leu Asn Pro Thr Thr Gly Asp Ala Asn Phe Ala Glu Lys Phe
cag gge agg gte gee etg ace aga gae acg tee ate age aca gee tat
                                                                   240
Gln Gly Arg Val Ala Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
tta caa cta gac agc ctc aaa tct gac gac acg gcc gta tat tat tgt
                                                                   288
Leu Gln Leu Asp Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
geg gga aaa gag ggt gee tgg gge eag gge ace etg gte ace gte teg
                                                                   336
Ala Gly Lys Glu Gly Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser
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agt gg
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Ser
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aca gtc agg atc aca tgc caa gga gac agc ctc aga cac ttt tat cca
Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg His Phe Tyr Pro
aac tgg tac cag cag aag cca gga cag gcc cct gta ctt gtc atc tat
Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
         35
                             40
ggt aaa aac aat cgg ccc tca ggg atc cca gac cga ttc tct ggc tcc
                                                                   192
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
     50
gge tea gga aac aca ggt tee ttg acc atc act ggg gee eag geg gaa
Gly Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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                     70
gat gag gct gac tat tac tgt ggc tcc cgg gac agc agt ggt atc cat
                                                                   288
Asp Glu Ala Asp Tyr Tyr Cys Gly Ser Arg Asp Ser Ser Gly Ile His
gtg gta ttc ggc gga ggg acc aag gtc acc gtc cta ggt
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Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
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Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg His Phe Tyr Pro 20 25 30

Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 35 40 45

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 50 55 60

Gly Ser Gly Asn Thr Gly Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gly Ser Arg Asp Ser Ser Gly Ile His

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tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttt agc agc tat 96 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

gcc atg agc tgg gtc cgc cag gct cca ggg aag ggg ctg gag tgg gtc 144
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

tca gct att agt ggt agt ggt agc aca tac tac gca gac tcc gtg 192 Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 50 55

aag ggc cgg ttc acc atc tcc aga gac aat tcc aag aac acg ctg tat 240 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

ctg caa atg aac age ctg aga gec gag gac acg gec gtg tat tac tgt 288 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

gcg aga gat gac gat gac tac gac ttt gac tac tgg ggc cgg ggg aca 330 Ala Arg Asp Asp Asp Tyr Asp Phe Asp Tyr Trp Gly Arg Gly Thr

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50 55 60

ggc tcc aag tct ggc acc tca gcc tcc ctg gcc atc agt ggg ctc cag

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln

65

70

75

80

tct gag gat gag gct gat tat aac tgt gca gca tgg gat gac agc ctg 288 Ser Glu Asp Glu Ala Asp Tyr Asn Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

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<211> 111

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<213> Homo sapiens

<400> 69

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ala Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ile Asn 20 25 30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Asn Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Ser Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 100 105 110

<210> 70

<211> 66

<212> PRT

<213> Homo sapiens

<400> 70

Asp Gln Val Leu Phe Ile Asp Gln Gly Asn Arg Pro Leu Phe Glu Asp 20 25 30

Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile
50 60

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Ser Val
65
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<210> 71 <211> 34

<212> PRT

<213> Homo sapiens

<400> 71

Phe Leu Ala Cys Glu Lys Glu Arg Asp Leu Phe Lys Leu Ile Leu Lys  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Lys Glu Asp Glu Leu Gly Asp Arg Ser Ile Met Phe Thr Val Gln Asn  $20 \\ \hspace{1.5cm} 25 \\ \hspace{1.5cm} 30$ 

Glu Asp